

### REMARKS

This application has been carefully reviewed in light of the Office Action dated March 3, 2004. Claims 1 to 12, 19 to 25 and 29 to 35 remain pending in the application, of which Claims 1, 9, 12, 19, 29, 32 and 34 are independent. Reconsideration and further examination are respectfully requested.

Claims 1, 9, 12, 19, 29, 32 and 34 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,321,270 (Crawley), and Claims 2 to 8, 10, 11, 20 to 25, 30, 31, 33 and 35 were rejected under 35 U.S.C. § 103(a) over Crawley in view of U.S. Patent No. 6,366,913 (Fidler). Reconsideration and withdrawal of the rejections are respectfully requested.

The present invention concerns informing users of changes made to a directory in a directory server. According to the invention, plural groups/multicast groups are established, where each group/multicast group corresponds to a particular type of change made to the directory in the directory server. For instance, respective multicast groups are established for ADD changes when a change is made to add an entry in the directory, DELETE changes when a change is made to delete an entry in the directory, MODIFY changes when a change is made to modify an entry in the directory, etc. Thus, each group/multicast group corresponds to a particular type of change made in the directory. Users that want to receive information regarding particular types of changes made to the directory, register with the group/multicast group corresponding to the type of change information they want to receive. For example, if a user only wants to receive information regarding ADD changes made to the directory, they register with the ADD group/multicast group. Then, when a change is made to the directory in the directory

server, change information corresponding to the type of change made to the directory is generated, with the generated change information being submitted to the group corresponding to the particular type of change made in the directory server. For example, when the ADD change is made to the directory server, ADD change information is generated and is multicast only to the members of the ADD multicast group so that only those members that have registered with the ADD multicast group receive the change information. As a result, users can register with the group corresponding to the types of change information they want to receive and can be notified whenever that particular type of change is made to the directory in the directory server.

Referring specifically to the claims, amended independent Claim 1 is a method for multicasting changes made in a directory server, comprising the steps of establishing plural multicast groups, each multicast group corresponding to a respective change category for a type of change made to a directory in the directory server, and submitting change information for multicasting responsive to a change being made to the directory in the directory server, the change information being submitted to each member which belongs to a selected one of the plural multicast groups corresponding to the change category of the type of change made to the directory in the directory server.

Amended independent Claims 32 and 34 are method and computer-executable process steps claims, respectively, that are along the lines of Claim 1, but which do not call for the change information to be submitted via multicasting.

Amended independent Claim 9 is directed to the user side for receiving change information. More specifically, Claim 9 is a method for obtaining directory server change information, comprising the steps of registering as a member of at least one of a

plurality of multicast groups, each of the plurality of multicast groups corresponding to a respective change category for a type change made to a directory in the directory server, and receiving a multicast transmission from the directory server, the multicast transmission containing change information submitted to each member which belongs to the multicast group corresponding to the change category of the type of change made to the directory in the directory server.

Amended independent Claim 29 is a computer-executable process steps claim that substantially corresponds to Claim 9.

Amended independent Claim 12 is directed to the directory server side, and more specifically is an apparatus for multicasting changes made in a directory server, wherein plural multicast groups are established such that each multicast group corresponds to a respective change category for a type of change made to a directory in the directory server, comprising a processor for executing executable process steps, and a memory medium storing executable process steps, wherein the executable process steps comprise (a) generating change information responsive to a change being made to the directory in the directory server, wherein the change information corresponds to the type of change made to the directory, and (b) submitting the change information to each member which belongs to a selected one of the plural multicast groups corresponding to the change category of the type of change made to the directory in the directory server.

Amended independent Claim 19 is a computer-executable process steps claim that substantially corresponds to Claim 12.

The applied art, alone or in any permissible combination, is not seen to disclose or to suggest the features of the present invention. More particularly, the applied

art is not seen to disclose or to suggest at least the feature of submitting change information to each member which belongs to a selected one of plural groups/multicast groups, where each group/multicast group corresponds to a respective change category of a type of change made to a directory in a directory server. Along the same lines, the applied art is not seen to disclose or to suggest receiving a multicast transmission from the directory server, the multicast transmission containing change information submitted to each member which belongs to the multicast group corresponding to the change category of the type of change made to the directory in the directory server.

Crawley is merely seen to disclose multicasting control information by a control node to other nodes in a communication path. According to the patent, one node is selected as a control point and stores a database that includes a network topology for nodes that are to be involved in a multicast session. When the control information is established in the control point node, the control point multicasts the control information to the other nodes that are to be part of the multicast session. If a new node is added, the control point node updates the topology and then multicasts new (updated) control information to all the other nodes that are to be involved in the multicast session. Thus, in Crawley, the multicast groups are merely groups of nodes that are to participate in a multicast session, but are not set-up based on specific change categories corresponding to a particular type of change made to a directory in the directory server. That is, there simply are no groups established based on particular types of changes made in the control point. Accordingly, there is no correlation between change categories for types of changes made to the directory and the groups.

The foregoing lack of correlation is further evidenced by the fact that all nodes that are to participate in the multicast session receive the new control information from the control point node regardless of the type of change made to the directory which invoked the change in the network topology. That is, any and all changes that are made in the control point node with regard to members in the communication path result in new control information being transmitted to all members of the multicast session. As such, when a new member is added, new control information is multicast to all members of the session, and when a member is deleted, new control information is multicast to all members. Accordingly, Crawley simply is not seen to disclose or to suggest the features of the present invention and independent Claims 1, 9, 12, 19, 29, 32 and 34 are not believed to be anticipated by Crawley.

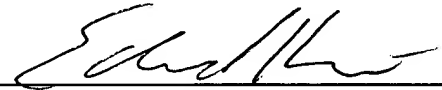
Fitler is not seen to add anything that, when combined with Crawley, would have disclosed or suggested the features of the present invention. In this regard, Fitler is merely seen to disclose that different groups are established to receive multicast messages, where the groups are based on such items as location, department, etc. Messages can then be multicast to the group members of a group using multicast, where members that are included in a directory server are looked-up to determine who is to receive the message. However, like Crawley, Fitler is not seen to disclose anything with regard to a correlation between types of changes made to a directory of a directory server, multicast groups corresponding to the types of changes, and submitting change information to the multicast group corresponding to a type of change made in the directory server.

In view of the foregoing deficiencies of the applied art, all of Claims 1 to 12, 19 to 25 and 29 to 35 are believed to be allowable.

No other matters having been raised, the entire application is believed to be in condition for allowance and such action is respectfully requested at the Examiner's earliest convenience.

Applicant's undersigned attorney may be reached in our Costa Mesa, California office at (714) 540-8700. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,



Attorney for Applicant

Registration No. 42,746

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-2200  
Facsimile: (212) 218-2200

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